PIPELINE

Design Survey

The following information shall be obtained and recorded in the field notes:

a. Profile along centerline (measuring wheels, altimeters, and topographic maps are acceptable tools for obtaining this information).
b. Topographic surveys as needed.
c. Water surface elevations as needed.

Design Data

The following shall be considered minimum in the design of all pipelines. The information shall be recorded in the design notes. Appropriate data shall be transferred to the construction drawings.

a. Capacity requirements and need for sanitary protection.
b. Hydraulic design.
c. Appurtenances size, location, and type.
d. Quantity computations.
e. Records indicating NRCS obligations regarding State and Federal regulations have been met.

Drawings and Specifications

The construction drawings shall include, but will not be limited to, the following:

a. Plan of entire system showing physical features of terrain, which will affect construction and pipeline operations.
b. Size, type, and class or pressure rating of pipe.
c. Location, size, and type of appurtenances.
d. Profile of pipeline.
e. Table of quantities.
f. Location map.

Practice specifications, along with applicable "Items of Work and Construction Details," shall be provided for each item or phase of construction.

Layout Survey Notes

The following information shall be recorded in the field notes:

a. Centerline alignment (where elevations are not critical, the route need only be flagged).
b. Offset cut stakes (where required).
c. Location of appurtenances.

Compliance Checks

The complexity of the pipeline will dictate the need for compliance checks during construction. All compliance checks shall be recorded in the field notes. Narratives of construction checks shall be recorded in the job diary or on a sheet in the field notes. Compliance checks shall include, but will not be limited to, the following:

a. Profile and depth of pipeline.
b. Location, size, and type of appurtenances.
c. Pipe length, diameter, type, class, or pressure rating.
d. Results of pressure test(s).
e. Statement of compliance.

As-Built Plans

As-Built plans shall be prepared for all pipelines. These drawings shall reflect all significant changes in linear measurements, quantities, alignment, or design changes. If there were no significant changes, the original drawings shall be marked "As-Built".